GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:2803
ANSWERED ON:11.05.2016
Climate Change
Sanjar Shri Alok

Will the Minister of EARTH SCIENCES be pleased to state:

(a) the number of programmes initiated by the Government for research in respect of the climate change on North Pole so far; and

(b) the results of these programmes and researches?

Answer

THE MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a-b) The National Centre for Antarctic and Ocean Research (NCAOR) has implemented following major research activities in respect of climate change on North Pole.

i. Long term monitoring of Kongsfjorden system of Arctic region for climate change studies to study long term variability of physical and biogeochemical parameters of the fjord.
ii. Investigations of atmospheric aerosols and there characterization over the Arctic during summer season to study Arctic haze formation and its impact on ice melt in the region in association with changes in radiative forcing and snow scavenging.
iii. Holocene climate change and sedimentation Pattern in Ny-Ã…lesund area, Svalbard through studying sediment dynamics and deposition of core samples collected.
iv. Mass balance and dynamics of selected glaciers of Spitsbergen, Svalbard to collect relevant number of snow samples (installed stake/snow pit) and further analyse them for ionic and trace metal concentration. Similarly meltwater will be collected from stream for their analysis of ionic and trace metal concentration.
v. Monitoring of Arctic using Micro Rain Radar and measuring the temperature and humidity profiles using a Microwave Radiometer.
vi. Investigation of dissolved as well as sedimentary forms of Organic matter in the Kongsfjorden for Dissolved as well as Particulate Partitioning of organic Matter Pool through measurement of DOC (Dissolved Organic Carbon) and DON (Dissolved Organic Nitrogen). Particulate organic Carbon and Nitrogen (POC and PON) Carbohydrates Monosacharides and Polysacharides.